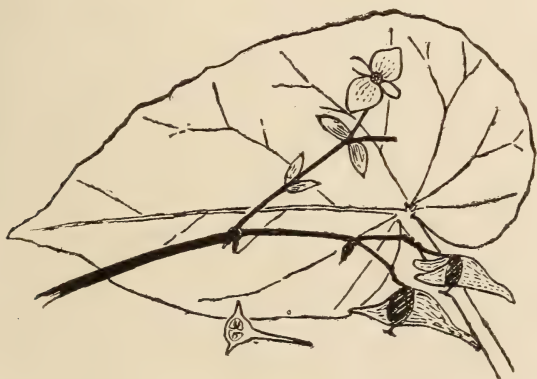


## Begonia Haniffii, a small tuberous species of the Islands of Lankawi.

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In 1896 Mr. Curtis obtained at Kasoom in the Siamese Malay States a tuberous *Begonia* which Mr. Ridley described in this *Journal* (No. 50, 1911, p. 106) as *Begonia Curtisii*. The new species here to be described is its counterpart from the islands of Lankawi. Both Kasoom and Lankawi are limestone regions, and both *Begonias* grow on the limestone rocks, dying down before November and surviving to February, when they sprout, by underground tubers.



*Begonia Haniffii* was obtained some five years ago by Mr. Mohamed Haniff, and brought into the Waterfall Gardens, Penang, where it persists. From the underground tuber it attains a height at about eight inches; if a weak plant it may have one stem only; if a strong plant it may have up to six. These stems carry 2-4 leaves of which the largest appears to be one with the cordate half to the right of the midrib. The leaves in outline are as drawn here; they are of a dark green thickly covered with small silvery spots, each spot a patch of 40-100 air-containing cells often but not always around the base of a short air-containing hair. Such spots in this species often touch the larger veins. The stem is slightly translucent, crimson, with a little entangled dark hair here and there, but chiefly below: it zigzags at the nodes. The colour, translucency and slight hairiness extend to the petioles. The stipules are pale with a little of the crimson colour along their nerves. The flowers

are segregated, the females occupying the best places, the males on lateral branches. The flowers are white with a slight amount of the crimson pigment along the veins. The male flowers may be  $\frac{3}{4}$  inch across and 1 inch from top to bottom. The stamens are about 120 in a globose cluster, not having the connective extended. The female flowers are 5-merous, about  $\frac{3}{4}$  in. across. The style bifurcates close to the base, and each half with a considerable amount of fullness ends in a dull yellow typically marginal stigma. The ovary has two cells with the placenta in each as two plates. The wings of the fruit outside these two cells make nearly equilateral triangles; but the unpaired wing is much elongated, and slightly hooked at the point. The surface of the capsule before maturity is somewhat mealy by reason of sloughing cells.

*Begonia Haniffii*, species in sectione *Platycentro*, ad *B. Curtisii*, Ridl., maxime affinis; differt praecipue fructu longe alato, et foliis magis longioribus.

*Radix* tuberosa. *Caules* erecti, 20 cm. alti, coccinei, hinc inde pilis fuscis tortis tecti, subtranslucentes. *Folia* tenuissime herbacea, inaequilateralia, ad 15 cm. longa, ad 8 cm. lata, 6—7-nervia dense argenteo-maculata maculis ad 2 mm. diametro, praeter pilos perparvos emortuos in medio macularum glabra: petiolus ad 8 cm. longus, colore cauli similis; stipulae 10 mm. longae, ovatae ex basi lata, acutae, 5-nerves, pallidae, in nervis coccineo-tinctae. *Flores masculini* in ramis lateralibus, albi, in nervis coccineo-tincti: petala majora 10 mm. longa, petala minora 8 mm., majora ovata obtusa, minora anguste obovata. *Antherae* circa 120, apice rotundatae. *Flores foeminei* 5-meri, albi, 10 mm. diametro. *Stylus* propè basi bifidus; rami plicati. *Fructus* ob cellulas emortuas subfarinosus, biloculatus, trialatus ala majori ad 20 mm. longa, apice fere hamata, alis minoribus subaequalateralibus 10 mm. longis. *Semina* numerosissima, pallide umbrina, angulata.

Planta haec ex vivo descripta habitat in rupibus calcareis insularum Lankawi. Folia vigescent mense Martio; caules marcent mense Octobri.